



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

C2-4-4

Job Sheet 185851



Part No: C2-4-4

Job Qty: 6 ea

Part Name: Load Beam - C2 Hook



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 11/5/18

Job Tracking No:

Due Date: 11/16/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG C2-4-4A / C2-4-4KA Rev. 7 IPP Rev. A 18.09.19 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	6 Ea	11/16/18	11/16/18	0.00	0.00	Start Up Waterjet2		02/18/11/05
100	Waterjet - Flow - B4B	6 pcs	11/16/18	11/16/18	0.08	1.00	Waterjet 2 OMAX		02/18/11/05
120	CNC Vertical Machining	6 pcs	11/16/18	11/16/18	2.00	3.00	MORI NV5000-1		NOT require PL
130	QC	6 pcs	11/16/18	11/16/18	0.00	0.00	QC2 Machining-5		NOT require PL
140	QC	6 pcs	11/16/18	11/16/18	0.00	0.00	QC8 Machining-5		NOT require PL
150	Outsource	6 pcs	11/16/18	11/16/18	0.00	0.00	Outsource1 ARROO2-VW		17 Jan 2019
160	Packaging	6 pcs	11/16/18	11/16/18	0.00	0.00	Packaging2		JAN 17 2019
170	QC	6 pcs	11/16/18	11/16/18	0.00	0.00	QC6		38
180	Packaging	6 pcs	11/16/18	11/16/18	0.00	0.00	Packaging3-2		Donat 39
190	QC21-SA	6 Ea	11/16/18	11/16/18	0.00	0.00	QC21		21 JAN 21 2019

Part Op 100 - 1-Cut C2-4-4 blank (CANAM FOLDER) Dwg Rev: 7 Prog Rev: 7 2-Deburr if necessary
Descriptions: 120 - 1-Machine as per folio FC366 FOLIO REV: _____ DWG REV: _____ 2-Deburr ***MACHINE
ENGRAVE AS PER DWG***
150 - 1--Issue P/O to Metcore ; P/O _____ RC 53-56 2-Bead blast 3- Certificate of Conformity is required

GA191

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
MT-4140-S-0.750	AISI 4140 / 4142 Steel Sheet 0.750"	.8460 sf (.141 ea)	90-Start up Operation	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	MT-4140-S-0.750	1	9	0

Part Specifications

Specifications could not be found.

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								



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1270 Aberdeen Street
Newcastle, ON K84 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartero.com
www.dartaerospace.com

Container No: S124626



Part: C2-4-4

Job No: 185851

Serial No/Batch: S124626

Revision: 7

Inspector:

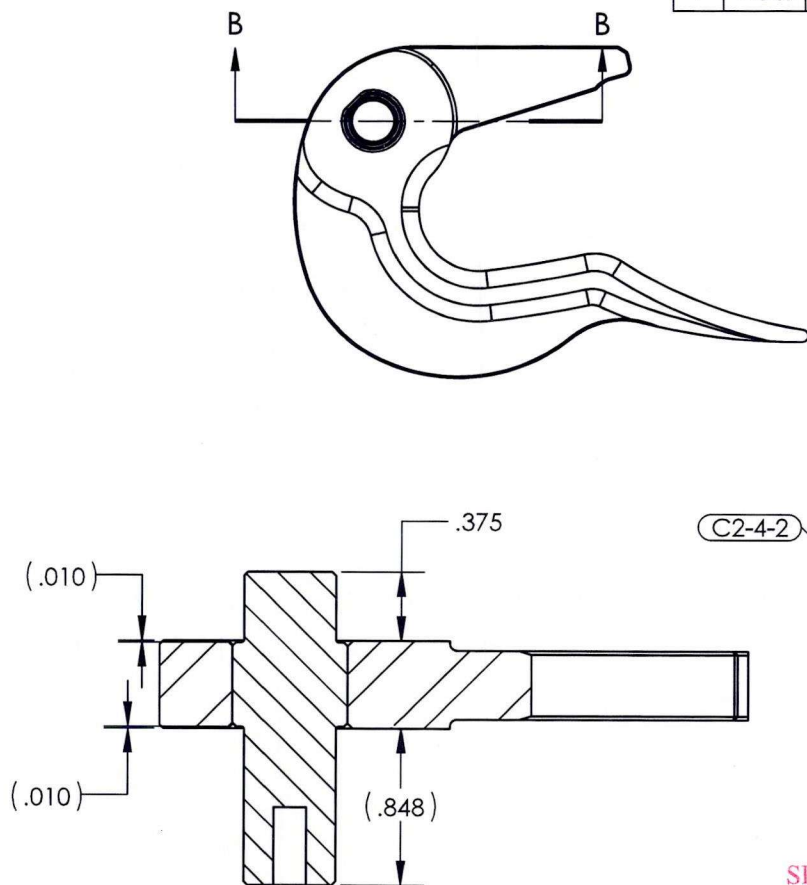
Exp Date:

Instructions:

Date: 11/05/18

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
4		AS DRAWN BY CANAM.	8/22/2012	JAG
5		CHANGED NIKEL PLATE FINISH THICKNESS WAS .001 IS .0009-.0011	1/4/2013	BIM
6		ADDED BAKE NOTE.	12/5/2013	JAG
7	14-0103	C2-4-4A DELETED LASER ENGRAVE NOTE  .	8/8/2014	DPD
				RW



SECTION B-B
SCALE 1:1

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 185857 MWS
18-11-05

(C2-4-4A)

C2 LOAD BEAM ASSY

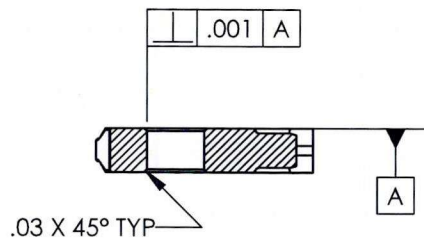
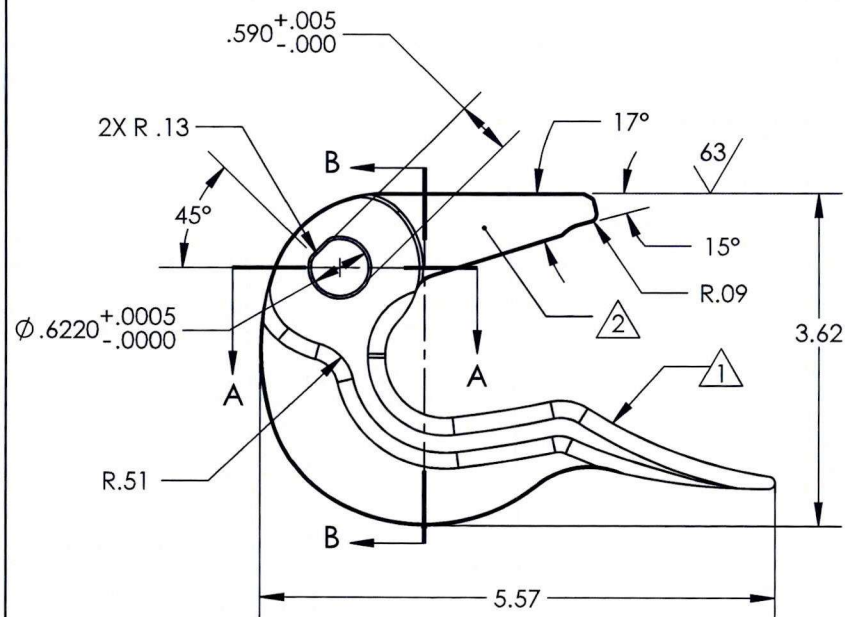
NOTE:

1. NICKEL PLATE .0009 - .0011, BAKE AFTER PLATING.

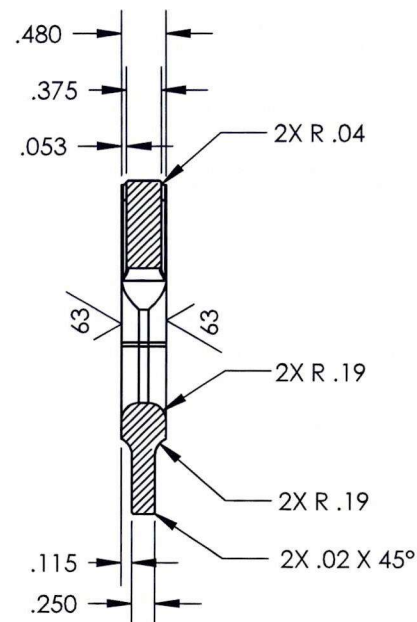
DART AEROSPACE	
TITLE C2 LOAD BEAM ASSEMBLIES	
DWG NO. C2-4-4A / C2-4-4KA	REV 7
MAT'L UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1	DRAWN BY: CANAM APPROVED <i>D Weid</i> HEAT TREAT FINISH SEE NOTE 1 SPEC USED ON MODEL
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:2	DATE 11/5/2009
SHEET 2 OF 6	

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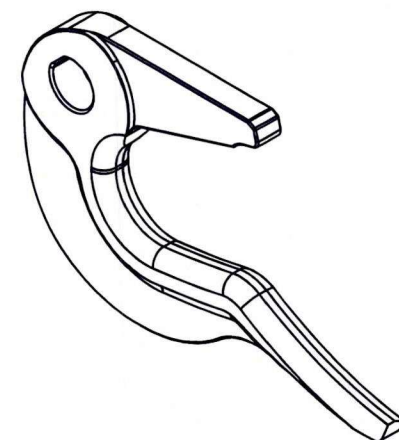
REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		AS DRAWN BY CANAM.			
2		CHANGED R.095 TO R.13, ADDED TOLERANCE TO .590 DIMENSION.	8/21/2012	JAG	
5		ADDED MISSING 2X R. 188.	1/4/2013	BIM	SE
7	14-0103	C2-4-4 ADDED MACHINE ENGRAVE NOTE.	8/6/2014	DPD	RW



SECTION A-A



SECTION B-B



NOTES:

- 1 USE DXF PROFILE FOR PART CONTOURS.
- 2 MACHINE ENGRAVE BATCH NUMBER.

DART AEROSPACE	
TITLE C2 LOAD BEAM ASSEMBLIES	
DWG NO. C2-4-4A / C2-4-4KA	REV 7
MAT'L 4140	DRAWN BY: CANAM
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED: <i>D. Weil</i>
.XXX ± .005	HEAT TREAT RC 53-56
.XX ± .01	FINISH SEE C2-4-4A
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:2	DATE 5/10/2002
SHEET 5 OF 6	

C2-4-4

LOAD BEAM C2-HOOK



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO041619



Supplier: ARR002-VU
Arrow Tech Machine Works
29751 E. Enid Road,
Unit C
Eugene, OR 97402 USA
Phone: 541-780-6938
Fax: 458-215-4938

PO No: PO041619

PO Date: 11/6/18

Due Date: 1/18/19

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Phone: *Revision*

Ship To:

Pymt Terms: Net 30

Freight Terms:

Special Comments:

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1	184313	C3-4-4K	Load Beam	Firmed	-	1/18/19	8 pcs	0 pcs	8 pcs	\$188.38/pcs	\$1,507.04
Line Item Note Machining Only <i>8x JAN 17 2019</i>											
2	177122	C3-4-4	Load Beam 1-Issue P/O to Metcore ; P/O _____ RC 53-56 2-Bead blast 3- Certificate of Conformity is required	Firmed	-	1/18/19	6 pcs	0 pcs	6 pcs	\$199.72/pcs	\$1,198.32
Line Item Note Machining Only <i>6x JAN 17 2019</i>											
3	184312	C2-4-4	Load Beam - C2 Hook 1-Issue P/O to Metcore ; P/O _____ RC 53-56 2-Bead blast 3- Certificate of Conformity is required	Firmed	-	1/18/19	4 pcs	0 pcs	4 pcs	\$161.00/pcs	\$644.00
Line Item Note Machining Only <i>4x JAN 17 2019</i>											
4	185851	C2-4-4	Load Beam - C2 Hook 1-Issue P/O to Metcore ; P/O _____ RC 53-56 2-Bead blast 3- Certificate of Conformity is required	Firmed	-	1/18/19	6 pcs	0 pcs	6 pcs	\$161.00/pcs	\$966.00
Line Item Note Machining Only <i>6x JAN 17 2019</i>											

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Dart Aerospace Ltd.
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K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO041619



Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
5	179670	C3-4-4	Load Beam 1--Issue P/O to Metcore ; P/O RC 53-56 2-Bead blast 3- Certificate of Conformity is required	Firmed	-	1/18/19	5 pcs	0 pcs	5 pcs	\$199.72/pcs	\$998.60

5x JAN 17 2019

Grand Total: \$5,313.96

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

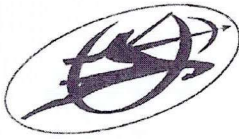
A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 1/17/19 1:19 PM dart.Lussier.Patrick



**PHGE Machineworks dba
Arrowtech Machineworks**
29751 E Enid Rd. Unit C
Eugene, Oregon 97402
Phone: (541) 780-6938
Fax: (458) 215-4938

Packing Slip

NO. 383

Date: 1/15/2019 ✓
PO Ref: 041619 ✓
Ship via: Fedex Priority

Bill To:
Dart Aerospace
1270 Aberdeen St. Hawkesbury, ON
CANADA K6A 1K7

Ship To:
Dart Aerospace
1271 Aberdeen St. Hawkesbury, ON
CANADA K6A 1K8

Qty	Item	Part No.
8 ✓	LOAD BEAM (S117994) 184313	C3-4-4K ✓
6 ✓	C2 LOAD BEAM (S124626) 185851	C2-4-4 ✓
6 ✓	LOAD BEAM (S074751) 177122	C3-4-4 ✓
5 ✓	LOAD BEAM (S085034) 179670	C3-4-4 ✓
4 ✓	LOAD BEAM (S117624) 184312	C2-4-4 ✓

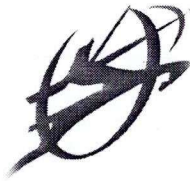
DAS
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9-85

Received by: _____

Packaged by: _____

Checked by: _____

Thank You



ARROW TECH MACHINE WORKS

Certificate of Conformance

Your Purchase Order No: 041619 Dated: 1/15/19
Our Order / Job No: 041619-4AWT Order Qty: 6
Part Name: C2 LOAD BEAM
Part Number C2-4-4
Lot Size: S124626 Ship Date: 1/15/19

We certify that these parts shipped to you are of domestic or international manufacture and conform to all requirements of the Purchase Order. These parts have been manufactured and inspected in accordance with all required specifications, instructions and drawings. Any applicable specifications are listed below:

Drawing Number: C2-4-4A/C2-4-4KA Rev: 7

Material Size and Type: 4140 STEEL

Material Specifications: STEEL: ASTM A108, ASTM A29

Heat Treatment: N/A

Plating/Finish: N/A

Mercury Contamination: The material used to process this order has not come in contact with mercury or mercury bearing instruments.

Date: 1/15/19

Signed: Herbert M. Feld

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9-89

PHGE Machine Works LLC dba Arrow Tech Machine Works
29751 E. Enid Rd. Unit C Eugene, Oregon 97402
Main: (541) 780-6938 | Fax: (458) 215-4938
www.atechmachineworks.com